

LISTING OF THE CLAIMS

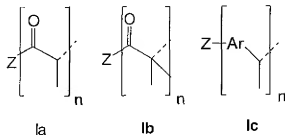
1. (currently amended) A thermoformed film ~~obtained by techniques for the conversion of thermoplastics, such as extrusion, starting from a~~ composition comprising:

- from 95 to 100% by weight of at least one block copolymer corresponding to the formula $(A)_m(B)_n$ -I and

- from 0 to 5% by weight of at least one polymer A,

n being an integer greater than or equal to 2, m being an integer less than or equal to n, B being a polymer block, bonded directly to the core I via a covalent bond, polymer block B containing obtained by the polymerization of a mixture of monomers monomer units (B_0) comprising at least 60% by weight of acrylic ~~monomers~~ monomer units (b_1) and A being a polymer block, bonded directly to the B block via a covalent bond, ~~obtained by the polymerization of~~ containing a mixture of monomers monomer units (A_0) comprising at least 60% by weight of methacrylic ~~monomers~~ monomer units (a_1) ,

the core (I) being an organic group corresponding to one of the following formulae:



in which Ar denotes a substituted aromatic group and Z denotes a polyfunctional organic or inorganic radical with a molar mass of greater than or equal to 14, wherein polymer A and polymer block A have the same composition.

2. (currently amended) The film as claimed in claim 1, characterized in that said polyfunctional organic radical is ~~chosen from~~ selected from the group consisting of 1,2-ethanedioxy, 1,3-propanedioxy, 1,4-butanedioxy, 1,6-hexanedioxy, 1,3,5-tris(2-ethoxy)cyanuric acid, polyaminoamine, ~~such as~~ polyethyleneamines, or 1,3,5-tris(2-ethylamino)cyanuric acid, polythioxy radicals, phosphonate radicals, and or polyphosphonate radicals.

3. (original) The film as claimed in claim 1, characterized in that said polyfunctional inorganic radical is chosen from complexes of formula $M^{n+}O_n^-$ in which M is a magnesium, calcium, aluminum, titanium, zirconium, chromium, molybdenum, tungsten, manganese, iron, cobalt, nickel, palladium, platinum, copper, silver, gold, zinc or tin atom.

4. (currently amended) The film as claimed in ~~any one of claims 1 to 3~~ **claim 1**, characterized in that said composition ~~it~~ is obtained according to the controlled polymerization process consisting of

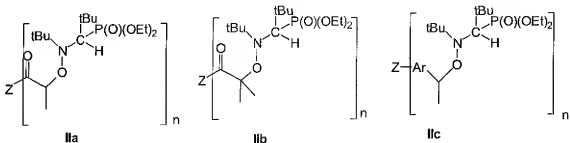
- the polymerization at a temperature of between 60 and 150°C of the mixture B₀ in the presence of an alkoxyamine and of an agent for controlling the polymerization up to a degree of conversion of 90%,

- the removal of a portion or of all of the unreacted monomers B₀,

- the addition and the polymerization of the mixture A₀,

- the removal of all of the unreacted monomers and recovery of the copolymer formed.

5. (currently amended) The film as claimed in claim 4, characterized in that the alkoxyamine is chosen from the compounds corresponding to one of the following formulae:



6. (currently amended) The film as claimed in claim 4 or 5, characterized in that the control agent is chosen from the compounds corresponding to one of the following formulae:



7. (currently amended) The film as claimed in ~~one of the preceding claims~~ claim 1, characterized in that the mixture of monomers B₀ comprises:

- from 60 to 100% by weight of acrylic monomers (b₁) chosen from alkyl acrylates with an alkyl chain comprising at least two carbon atoms and ~~preferably at least four carbon atoms, such as butyl acrylate, octyl acrylate, nonyl acrylate, 2-ethylhexyl acrylate, polyethylene glycol acrylates or acrylonitrile,~~

- from 0 to 40% by weight of monomers (b₂) chosen from monomers which can be polymerized by the radical route, ~~such as ethylenic, vinyl and similar monomers.~~

8. (currently amended) The film as claimed in ~~any one of the preceding claims~~ claim 1, characterized in that the mixture A₀ comprises

- from 60 to 100% by weight of at least one methacrylic monomer (a₁), chosen from alkyl-methacrylates, ~~such as methyl-, butyl-, octyl-, nonyl- or 2-ethylhexyl-methacrylate, or also functional methacrylic derivatives, such as methacrylic acid, glycidyl-methacrylate, methacrylonitrile or any methacrylate comprising an alcohol, amide or amine functional group,~~

- from 0 to 40% by weight of at least one monomer chosen from anhydrides, such as maleic anhydride, vinylaromatic monomers, ~~such as styrene or its derivatives, in particular α -methylstyrene,~~ and the monomers corresponding to (b₁).

9. (currently amended) The film as claimed in ~~any one of the preceding claims~~ claim 1, characterized in that the monomers B₀ represent from 10 to 60% by weight of the total weight of the monomers composing the copolymer.

10. (currently amended) The film as claimed in ~~any one of the preceding claims~~ claim 1, characterized in that the B block represents from 10 to 50% by weight of the copolymer and ~~preferably between 20 and 50%.~~

11. (currently amended) The film as claimed in ~~any of the preceding claims~~ claim 1, characterized in that the B block exhibits a T_g of less than 0°C.

12. (currently amended) The film as claimed in ~~any one of the preceding claims~~ claim 1,

characterized in that it exhibits elastomeric domains B with a an average size of less than 50 nm.

13. (currently amended) The film as claimed in ~~any one of the preceding claims~~ claim 1, characterized in that it exhibits a thickness of between 50 and 200 microns ~~and preferably between 70 and 90 microns~~.

14. (currently amended) The film as claimed in ~~any one of the preceding claims~~ claim 1, having a modulus of elasticity of between 300 and 1800 MPa, a haze of less than 2 and an elongation at break of greater than 60%.

15. (currently amended) The film as claimed in ~~any one of the preceding claims~~ claim 1, characterized in that it additionally comprises an inorganic or organic pigment.

16. (currently amended) ~~A multi-layer composition comprising the~~ The use of a film as claimed in ~~any one of claims 1 to 15~~ claim 1, as a surface treatment for the protection of materials of directly attached to a material selected from the group consisting of acrylonitrile-butadiene-styrene (ABS), polycarbonate (PC), poly(vinyl chloride) (PVC), polystyrene (PS), high impact polystyrene (HIPS) or polypropylene(PP) type.

17 – 22 (cancelled)